

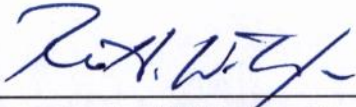


**To the Honorable Council
City of Norfolk, Virginia**

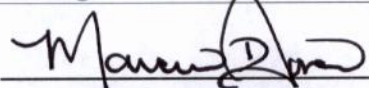
May 12, 2015

From: David Ricks, P.E., Director of Public Works

Subject: Acceptance of National Fish and Wildlife Foundation grant for the implementation of water quality best management practices.

Reviewed: 
Ronald H. Williams, Jr., Deputy City Manager

Ward/Superward: Citywide

Approved: 
Marcus D. Jones, City Manager

Item Number: **R-8**

- I. **Recommendation:** Adopt Ordinance
- II. **Applicant:** City of Norfolk, Department of Public Works
- III. **Description**
This ordinance will authorize the acceptance and appropriation of the National Fish and Wildlife Foundation grant of \$80,000 to fund the implementation of various water quality best management practices including rain barrel installation, nutrient management plan development, soil testing, tree planting and workshops.
- IV. **Analysis**
This funding will be used to assist the City will meeting storm water regulatory requirements, meeting the Chesapeake Bay Total Maximum Daily Load, and improving local water quality.
- V. **Financial Impact**
The grant will fund \$80,000 for implementation of these practices with a \$60,000 match from the Storm Water Special Revenue. The grant will be administered utilizing current Storm Water Management staff.

VI. Environmental

There is no negative environmental impact. These projects have a positive impact on local water quality, as well as, assist the City with meeting the water quality regulatory mandates from the EPA and DEQ.

VII. Community Outreach/Notification

Public notification for this agenda item is not required.

VIII. Board/Commission Action

N/A

IX. Coordination/Outreach

This ordinance has been coordinated with the City Attorney's office.

Supporting Material from the Department of Public Works:

- Ordinance
- Grant Award Letter
- Application Package

NORFOLK, VIRGINIA

Pursuant to Section 72 of the City Charter, I hereby certify that the money required for this item is in the city treasury to the credit of the fund from which it is drawn and not appropriated for any other purpose.

\$ 140,000.00 2275-35-8989
Whitney M. Kelly Account
Director of Finance Date 4/16/15

ORDINANCE No.

AN ORDINANCE ACCEPTING A NATIONAL FISH AND WILDLIFE FOUNDATION GRANT IN AN AMOUNT NOT TO EXCEED \$80,000 FOR THE IMPLEMENTATION OF STORM WATER BEST MANAGEMENT PRACTICES AND APPROPRIATING AND AUTHORIZING THE EXPENDITURE OF THE \$80,000 GRANT AND \$60,000 IN MATCHING FUNDS FOR WATER QUALITY IMPROVEMENT PRACTICES AND PROJECTS.

— — —

WHEREAS, the City desires to accept grant funds of up to \$80,000 from the National Fish and Wildlife Foundation; and

WHEREAS, these funds will be used to fund the development, design and construction of water quality improvement practices and projects; now, therefore,

BE IT ORDAINED by the Council of the City of Norfolk:

Section 1:- That the City hereby accepts a National Fish and Wildlife Foundation Grant in an amount not to exceed \$80,000 for water quality improvement practices and projects.

Section 2:- That the grant funds in an amount not to exceed \$80,000 and \$60,000 matching funding are hereby appropriated and authorized for expenditure for water quality improvement practices and projects.

Section 3:- That the City Manager and other proper officers of the City are authorized to do all things necessary to receive the grant funds and administer the projects.

Section 4:- That this ordinance shall be in effect from and after its adoption.

Whitehurst, June

From: Shafer, Justin
Sent: Friday, January 09, 2015 10:34 AM
To: Whitehurst, June
Subject: FW: National Fish and Wildlife Foundation Grant Agreement #45258

Justin Shafer
Environmental Engineer
Field Engineering and Environmental Management
Department of Public Works- Operations
2233 McKann Ave
Norfolk, VA 23509
757-823-4048 (office)
757-282-8383 (cell)

From: easygrants@nfwf.org [mailto:easygrants@nfwf.org]
Sent: Monday, January 05, 2015 5:22 PM
To: Shafer, Justin
Subject: National Fish and Wildlife Foundation Grant Agreement #45258

Dear Justin Shafer:

We are pleased to advise you that the Board of Directors of the National Fish and Wildlife Foundation has approved a grant of \$80,000.00 to your organization to support the Expanding Norfolk's Citizen Water Quality Programs (VA) project. This grant is provided on the condition that these funds will be matched by matching contributions as outlined in the grant agreement, which is now available for review and signature.

Please go to the Easygrants login page at www.nfwf.org/easygrants and log in with your login credentials. (If you have forgotten your credentials, you can request them from the login page.) The "Execute Grant Agreement" task and its due date will appear on your home page. Click the "Execute Grant Agreement" task link to begin. Use this task to review and print the grant agreement. Please have the person authorized to execute this agreement on behalf of your organization or entity sign and date the agreement. Then, please return a signed copy of the agreement to NFWF by scanning and emailing the signed document to the Grants Administrator at the email address indicated in the grant agreement (or, if you prefer, you may mail the original copy to the Grants Administrator at the address indicated in the grant agreement). We will return to you by email a scanned copy of the fully executed original award agreement unless an original copy is requested.

If your grant includes \$25,000 or more in federal funds, NFWF requires additional information to satisfy the requirements of the Federal Accountability and Transparency Act of 2006. You will find the required form included after the signature page of your grant agreement. Please complete, sign, and return the form to NFWF along with your grant agreement.

Please contact the Grants Administrator listed in the grant agreement with any questions.

Thank you,
National Fish and Wildlife Foundation



NFWF

EasyGrantsID: 45258

National Fish and Wildlife Foundation – Chesapeake Bay Small Watershed Grants 2014, Full
Proposal

Title: Expanding Norfolk's Citizen Water Quality Programs

Organization: City of Norfolk

Grant Information

Title of Project

Expanding Norfolk's Citizen Water Quality Programs

Total Amount Requested	\$ 80,000.00
Matching Contributions Proposed	\$ 60,000.00
Proposed Grant Period	10/01/ 2014 - 03/01/ 2016

Project Description

The project will expand existing City and NGO residential and community water quality improvement programs in the city of Norfolk, Virginia, focusing on improving citizen participation.

Project Abstract

This project seeks to expand residential and community water quality improvement programs in the City of Norfolk, each of which seeks to instill a sense of ownership in citizens through the installation of stormwater best management practices (BMP) or habitat restoration projects on their residential properties or in the adjoining public right-of-way in their neighborhoods.

The project will fund the installation of various BMPs on residential lots through the City of Norfolk's recently launched Bay Star Homes program. BMPs supported through this grant will include rain barrels, nutrient management plans, soil testing and tree planting. In support of this program and others like it within the Hampton Roads region, the project will coordinate with the Alliance for the Chesapeake Bay to host training workshops on use of the Stormwater Management and Restoration Tracker (SMART) tool. Developed by the University of Maryland, in coordination the Chesapeake Bay Program, the SMART tool allows for efficient tracking and improved reporting of BMPs installed on residential lots.

The project will also fund City-distributed materials for projects coordinated by the Lafayette Wetlands Partnership and Friends of Norfolk's Environment. The local organization encourage citizen stewardship and ownership of habitat restoration, rain garden installation, tree planting, and beautification efforts in their communities, frequently implementing on public right-of-way in neighborhoods.

Organization and Primary Contact Information

Organization	City of Norfolk
Organization Type	State or Local Government
Organization Web Address	
Organization Phone	
Street Line 1	810 Union St Ste 508
Street Line 2	
City, State, Country, Postal Code	Norfolk, Virginia, North America - United States 23510
Region (if international)	



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EasyGrantsID: 45258

National Fish and Wildlife Foundation – Chesapeake Bay Small Watershed Grants 2014, Full
Proposal

Title: Expanding Norfolk's Citizen Water Quality Programs

Organization: City of Norfolk

Organization Congressional District District 2 (VA); District 3 (VA)

Primary Contact

Position/Title

Street Line 1

Street Line 2

City, State, Country, Postal Code

Justin Shafer

Environmental Engineer

2233 McKann Ave

Norfolk, Virginia, North America - United States, 23509

Region (if international)

Phone and E-mail

757-823-4048 x ; justin.shafer@norfolk.gov

Keywords

Conservation Action; Conservation Threat; Major Habitat Type; Other

Sub-keywords

Action - Education & Awareness; Action - Land/Water
Management; Action - Land/Water Protection; Action - Livelihood,
Economic & Other Incentives; Coastal; Coastal - Estuaries and
Bays; Terrestrial - Deciduous/mixed forest; Threat - Climate Change
& Severe Weather; Threat - Human Intrusions &
disturbance; Threat - Pollution; Threat - Residential &
Commercial Development; Urban

Other Keyword(s)



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National Fish and Wildlife Foundation – Chesapeake Bay Small Watershed Grants 2014, Full
Proposal

Title: Expanding Norfolk's Citizen Water Quality Programs

Organization: City of Norfolk

Project Location Information

Project Location Description	The City of Norfolk is a coastal community located in southeastern Virginia. The northern portion of the city borders the Chesapeake Bay, with numerous tributary river segments within its boundaries.
Project Country(ies)	North America - United States
Project State(s)	Virginia
Project Congressional District(s)	District 2 (VA); District 3 (VA)

Permits and Approvals

Permits/Approvals Description:

Permits/Approvals Status:

Permits/Approvals Agency-Contact Person:

Permits/Approvals Submittal-Approval Date:



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National Fish and Wildlife Foundation – Chesapeake Bay Small Watershed Grants 2014, Full
Proposal

Title: Expanding Norfolk's Citizen Water Quality Programs

Organization: City of Norfolk

Salaries and Benefits

	Units	Cost Per Unit	Total
Total Salaries and Benefits			\$0.00

Equipment

	Units	Cost Per Unit	Total
Total Equipment			\$0.00

Contractual Services

	Units	Cost Per Unit	Total
Nutrient Management Plan Development	20	\$250.00	\$5,000.00
Total Contractual Services			\$5,000.00
Proposed development of nutrient management plans on 20 residential properties by a certified contractor at an estimated rate of \$250/property. Additional proposed nutrient management to be conducted through City matching funds.			

Supplies and Materials

	Units	Cost Per Unit	Total
Buffer Planting Materials	4.5	\$10,000.00	\$45,000.00
Bioretention Planting Materials	12	\$1,200.00	\$14,400.00
Tree Planting Materials	600	\$7.00	\$4,200.00



EasyGrantsID: 45258

National Fish and Wildlife Foundation – Chesapeake Bay Small Watershed Grants 2014, Full

Proposal

Title: Expanding Norfolk's Citizen Water Quality Programs

Organization: City of Norfolk

Total Supplies and Materials			\$63,600.00
Restoration of 10,000 sq ft of buffer on public right-of-way at a cost of \$4.5/ sq ft. Up to 10% may apply towards contractor assistance for site preparation where volunteer efforts are not adequate due to site constraints.			
Development of 2500 sq ft of bio-retention systems on public right-of-way at a cost of \$12/ sq ft. Up to 10% may apply towards contractor assistance for site preparation where volunteer efforts are not adequate due to site constraints.			
Distribution of 600 trees to citizen adoptees through Bay Stars Homes and Neighborwoods programs for planting on residential or approved public property.			

Printing

	Units	Cost Per Unit	Total
Total Printing			\$0.00

Travel

	Units	Cost Per Unit	Total
Total Travel			\$0.00

Other

	Units	Cost Per Unit	Total
SMART Tool Training Workshop	2	\$3,600.00	\$7,200.00
Soil Test Analysis	300	\$14.00	\$4,200.00
Total Other			\$11,400.00



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EasyGrantsID: 45258

National Fish and Wildlife Foundation – Chesapeake Bay Small Watershed Grants 2014, Full
Proposal

Title: Expanding Norfolk's Citizen Water Quality Programs

Organization: City of Norfolk

Development and hosting of two workshops for the SMART tool, to improve tracking and reporting of residential BMPs in Hampton Roads. Estimated cost for development and implementation of the program by Alliance for the Chesapeake Bay, including minimal travel expenses estimated at \$3600/workshop.

Analysis of 300 soil tests by an extension service-approved lab, at an estimated cost of \$14/test, including shipping.

Budget Grand Total			\$80,000.00
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NFWF

EasyGrantsID: 45258

National Fish and Wildlife Foundation – Chesapeake Bay Small Watershed Grants 2014, Full Proposal

Title: Expanding Norfolk's Citizen Water Quality Programs

Organization: City of Norfolk

Matching Contributions

Matching Contribution Amount:	\$60,000.00
Type:	Cash
Status:	Pledged
Source:	City of Norfolk Stormwater FY 15 and FY 16 Budgets
Source Type:	Non-Federal
Description:	To expand its Bay Star Homes program, the City of Norfolk, Department of Public Works, has earmarked \$30,000 each from its FY15 and FY16 stormwater operating budgets to pilot residential BMP installation through the program.
Matching Contribution Amount:	\$36,800.00
Type:	In-kind
Status:	Pledged
Source:	City of Norfolk Stormwater FY15 and FY16 Budget
Source Type:	Non-Federal
Description:	The City anticipates management of the Bay Star Program and coordination with partner organizations on community projects will require time estimated as 0.2 FTE from the Public Outreach Coordinator and 0.2 FTE from the Environmental Engineer each FY.
Total Amount of Matching Contributions	\$96,800.00



EasyGrantsID: 45258

National Fish and Wildlife Foundation – Chesapeake Bay Small Watershed Grants 2014, Full
Proposal

Title: Expanding Norfolk's Citizen Water Quality Programs

Organization: City of Norfolk

Activities and Outcomes

Funding Strategy: Habitat Management

Activity / Outcome: CBSF - Green Infrastructure - Acres under urban nutrient mgt

Description: Enter the acreage under urban nutrient management practices.

Required: Recommended

Acres under urban nutrient mgt - Current: 0

Acres under urban nutrient mgt - Grant Completion: 25

Notes: The City proposes to develop nutrient management plans for 100 residential properties in the next 24 months. Based on an estimated average lot size of 1/4 acres, these plans will treat 25 acres of urban developed land. While current acreage under nutrient management plans is unknown, it is a goal of the Bay Star program to work with local NGOs and landscape professionals, as well as the Virginia Department of Conservation and Recreation, to determine this number.

Funding Strategy: Habitat Management

Activity / Outcome: CBSF - Green Infrastructure - # cisterns installed

Description: Enter the number of rain barrels or cisterns installed.

Required: Recommended

cisterns installed - Current: 0

cisterns installed - Grant Completion: 200

Notes: The City proposes to install 200 rain barrels on residential properties during the course of the grant. While the goal of the effort is citizen involvement, whenever possible efforts will be made to maximize water quality improvement by installing the barrels on downspouts draining maximum roof area.

Funding Strategy: Habitat Management

Activity / Outcome: CBSF - Green Infrastructure - Sq ft of bioretention installed

Description: Enter the square footage of bioretention installed.

Required: Recommended

Sq ft of bioretention installed - Current: 0

Sq ft of bioretention installed - Grant Completion: 1200

Notes: The City proposes to install bioretention systems equaling at least 1200 sq ft in size. These BMPs will be installed on public right-of-way within residential communities to act as demonstration projects to encourage residential rain gardens as part of a future expansion of the Bay Star Homes program.

Coordination with Lafayette Wetlands Partnership and Friends of Norfolk's Environment will seek community volunteers to assist in all stages of planning, design, construction, and maintenance of the BMPs in order to improve community support and ownership.



EasyGrantsID: 45258

National Fish and Wildlife Foundation – Chesapeake Bay Small Watershed Grants 2014, Full Proposal

Title: Expanding Norfolk's Citizen Water Quality Programs

Organization: City of Norfolk

Funding Strategy: Capacity, Outreach, Incentives

Activity / Outcome: CBSF - Volunteer participation - # volunteers participating

Description: Enter the number of volunteers participating in projects

Required: Recommended

volunteers participating - Current: 0

volunteers participating - Grant Completion: 300

Notes: The City proposes installation of numerous BMPs on residential properties and anticipates to reach at least 200 individual households. Implementation of habitat restoration, BMP installation, and tree planting on community property through coordination with Lafayette Wetlands Partnership and Friends of Norfolk's Environment will be expected to involve participation from at least an additional 100 volunteers.

Funding Strategy: Capacity, Outreach, Incentives

Activity / Outcome: CBSF - Outreach/ Education/ Technical Assistance - # people reached

Description: Enter the number of people reached by outreach, training, or technical assistance activities

Required: Recommended

people reached - Current: 0

people reached - Grant Completion: 25

Notes: In coordination with the Alliance for the Chesapeake Bay, the City proposes to organize and host two training workshops for the Stormwater Management and Restoration Tracking (SMART) tool. An initial training in late 2014 or early 2015 will focus on local NGO and municipal staff who are actively installing BMPs on residential properties, where the SMART tool will improve tracking and reporting. An additional workshop will be scheduled for early 2016 and will focus on training additional municipal and NGO staff, as well as local Master Gardeners and other interested parties. The training is anticipated to reach a minimum of 25 users of the SMART tool.

Funding Strategy: Habitat Restoration

Activity / Outcome: CBSF - Riparian restoration - Acres restored

Description: Enter the number of acres restored

Required: Recommended

Acres restored - Current: 0.00

Acres restored - Grant Completion: 0.23

Notes: The City proposes to restore 10,000 sq ft of buffer. These projects will be installed on public right-of-way within residential communities to act as demonstration projects to encourage residential buffers as part of a future expansion of the Bay Star Homes program. Coordination with Lafayette Wetlands Partnership and Friends of Norfolk's Environment will seek community volunteers to assist in



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National Fish and Wildlife Foundation – Chesapeake Bay Small Watershed Grants 2014, Full
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Title: Expanding Norfolk's Citizen Water Quality Programs

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all stages of planning, design, construction, and maintenance of the restoration projects in order to improve community support and ownership.

Funding Strategy: Habitat Restoration

Activity / Outcome: Tree Planting- # Trees Planted

Description: Other Metric

Required: Optional

Other Metric - Description: The City proposes to distribute 600 trees to be adopted by citizens through the Bay Star Homes program and Friends of Norfolk's Environment's Neighborwoods program.

Notes:



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National Fish and Wildlife Foundation – Chesapeake Bay Small Watershed Grants 2014, Full
Proposal

Title: Expanding Norfolk's Citizen Water Quality Programs

Organization: City of Norfolk

The following pages contain the uploaded documents, in the order shown below, as provided by the applicant:

A-133 Audit
GAAP audited financial statements
Letters of Support
Letters of Support
Letters of Support
Board of Trustees, Directors, or equivalent
Statement of Litigation
Spatial Data
Spatial Data
Letters of Support
CBSF Full Proposal Narrative

The following uploads do not have the same headers and footers as the previous sections of this document in order to preserve the integrity of the actual files uploaded.



NFWF

Expanding Norfolk's Citizen Water Quality Programs

Project Narrative

A. Objectives

Green infrastructure has become a buzzword in the water quality improvement world in recent years, capturing a wide array of structural stormwater best management practices (BMPs) and habitat restoration practices. Focus on these smaller-scale, often more efficient, practices have been strongly encouraged in environmental regulatory actions at all levels of government. While green infrastructure practices are being considered as an option in many municipalities across the country, for built-out cities such as Norfolk the use of these technologies is essential in meeting water quality requirements through redevelopment and retrofits. Even with this strong need, use of green infrastructure practices in Norfolk is still challenging. The City's geographic position directly adjacent to the Chesapeake Bay and near the Atlantic Ocean provide little elevation above ground-water, hindering development of larger structural green infrastructure projects, while opening up additional opportunities for the habitat restoration side of the green infrastructure philosophy. To overcome these limitations on structural practices and maximize benefits from habitat improvements the City is looking to smaller, community-driven projects on both private residential property and on public right-of-way within local neighborhoods.

This proposal seeks support to expand the City's recently launched Bay Star Homes (BSH) program. Modeled after other locally successful residential pledge and BMP implementation programs, including Elizabeth River Project's River Star Homes and Lynnhaven River Now's Pearl Homes, BSH seeks to expand opportunities for homeowners, in areas not served by other similar programs, to do their part to improve local water quality. The City proposes to rapidly expand the program to include several BMP options for residents to install on their property. In the 18 months grant period Norfolk proposes to install or develop 200 rain barrels, 300 trees, 100 nutrient management plans, and 300 soil tests in support of these plans. Additionally, the proposal seeks support for development of training workshops for the University of Maryland- developed Stormwater Management and Restoration Tracking (SMART) tool. Coordinating with the Alliance for the Chesapeake Bay, Norfolk will host two workshops over the course of the grant, allowing for a pilot of the tool in southeastern Virginia and improving tracking and reporting of residential BMPs.

Finally, the proposal seeks funding to further support several local NGO-led programs. Lafayette Wetland Partnership and Friends of Norfolk's Environment (FONE) encourage citizen stewardship and ownership of habitat restoration, structural BMP implementation, tree planting, and beautification efforts in their neighborhoods. Both organizations are successful at seeking community donations of resources and manpower; however, with additional material resources available the City hopes to spur an increase in these projects throughout the Norfolk. Proposed support includes 300 trees, design and materials for construction of up 2500 sq ft of bioretention systems, and materials for construction of 10,000 sq ft of estuarine buffer. All projects will be constructed on public right-of-way and will be heavily volunteer driven using the models developed by the Partnership and FONE. Further, the buffers and bioretention systems will act as demonstration projects to encourage such systems on residential properties in the next phase of Bay Star Homes expansion.

B. Project Priority

Launched in late April, the Bay Star Homes program has already reached over 150 residents who have pledged to undertake a series of actions at home in order to improve water quality. Interest in BMP implementation was also strong, with over 50 of these members signing up for a soil test of their lawn or adopting a native tree to plant on their property. While this City program will not limit its scope to these underserved areas, strong emphasis will be made on reaching out and maximizing improvements in residential areas where they have previously not been implemented. The success of both the pledge and BMP elements of the BSH program at our recent launch and several subsequent community events indicate adequate room in the local market for this City initiative despite other successful local programs. We strongly feel that by reaching out to citizens in unserved areas of the city and coordinating with other residential programs on timing of BMP implementation periods that several programs can easily coexist and thrive in Norfolk and will combine to have a greater effect on local water quality.

The proposed piloting of the SMART tool in Hampton Roads comes at a time when several NGO and municipal programs are expanding their service area to reach additional residents and encourage residential BMP implementation. By training staff in the use of the SMART tool at this point, when MS4 permits are still being developed and TMDL Action Plans will be in the near future, the valuable reporting aspects of the tool can be made a natural part of each program.

While some citizens see the value of restored habitat immediately, many see these areas as something to block their view or harbor vermin. By working with communities to develop small restoration projects on public land, they can begin to see the value of the habitats without infringing on their own property. For some the next step will be a move towards these action on their property, making the installation of small demonstration projects through the City's communities a key priority.

C. Overall Context

Developed in 2012 as the City of Norfolk's submission to Virginia Phase II WIP development, the document "Summary of the City of Norfolk's Response to the Chesapeake Bay" outlined the City's plan for meeting the requirements of the TMDL. Norfolk broke strategies into broad categories, two of which are directly relevant to the work proposed in this plan: Restoration of Natural Habitat and Development of New BMPs. As a coastal, largely built-out city, Norfolk is limited in its ability to address increasing regulatory storm water requirements due to lack of space and physical constraints such as a high ground water table and fill soils. While there are not many parcels available for development of large BMPs, smaller green infrastructure practices such as rain barrels and rain gardens, plus improvements through nutrient management, are highly viable in Norfolk. Many citizens implement these projects on their own, but others just need to be educated and are willing to take the next step and install BMPs on their property. While few residential properties yield substantial pollutant reductions on their own, the aggregate reductions from these practices can have a large impact, particularly at local subwatershed scales. Further, the combined effect of these practices may help to reduce runoff that plagues local communities with aging drainage infrastructure during storm event, reducing the effects of precipitation-based flooding.

Just as residential properties are ideal for small green infrastructure retrofits, unused right-of-way

spaces are perfect for habitat restoration projects. Many years of development and fill have stripped our shoreline of their natural plant communities. Restoration of these wetland and buffer communities, combined with replanting of the cities canopy, can assist in a major way in reducing and treating stormwater runoff. They may also assist in lessening the effects and sea level rise and increased tidal flooding through shoreline stabilization and reduction of wave action. Less permit intensive buffer restoration and tree planting are the focus of this proposal, though other funding sources are being sought for large scale living shoreline restoration projects which will easily mesh with those in this proposal.

D. Work Plan

The proposal is broken into three major components, each with individual tasks: Expansion of Residential BMP Implementation through Bay Star Homes, Improvement in Tracking and Reporting of Residential BMPs through use of the SMART tool, Support of NGO-led community BMP and habitat restoration projects. The schedule for implementation of BMPs and restoration projects will extend through the entire grant period.

Expansion of Residential BMP Implementation through Bay Star Homes

BMPs installed on residential property will be tracked for compliance with the City's MS4 permit and Bay TMDL requirements. Homeowners will receive the BMP free-of-charge, though a donation to local habitat restoration programs may be encouraged. Each recipient will sign an agreement whereby the property owner acknowledges the City's intent to count the BMP for this purpose and that it is the homeowners responsibility to maintain the BMP, submit bi-annual reports to the City, and allow certification inspection by City staff on an as-needed basis, estimated to be once every five years per Chesapeake Bay Program guidance.

Task 1: Install 200 Rain Barrels- 200 rain barrels, with at least 100 gallons volume each, will be installed on residential downspouts. Efforts will be made to install where the most runoff will be collected and where overflow can be safely infiltrated to pervious surfaces.

Task 2: Collect 300 soil samples and develop 100 nutrient management plans- Nutrient management plans will be developed for 100 residential properties by Virginia Certified Nutrient Management Planners. Emphasis will be placed on restoring organics and reducing phosphorous. 300 soil samples will be collected in support of this effort, with some properties requiring multiple tests. Based on an average lot size of ¼ acres it is estimated that 25 acres of residential property will be placed in nutrient management through this effort.

Task 3: Plant 300 Trees- 300 trees will be provided to homeowners, who will agree to plant and care for the tree on their property. Coordination with the City Forester will develop a list of reliable native trees which will be distributed primarily at community events in the early spring and fall. Emphasis will be placed on species that enhance canopy, while posing a lesser risk over time due to storm events.

Improvement in Tracking and Reporting of Residential BMPs through use of the SMART Tool

The Stormwater Management and Restoration Tracking (SMART) tool was developed by the University of Maryland, in coordination with the Chesapeake Bay Program, to simplify the task of

tracking BMPs installed on residential properties and reporting their aggregate pollutant reductions per residence and across a municipality. The tool has been piloted with success in Maryland and plans are underway for pilot programs in several areas of Virginia.

Task 4: Host Training Workshops for SMART Tool- The City, in coordination with Alliance for the Chesapeake Bay, proposes to extend this pilot to include the Hampton Roads region, where residential BMP installation is steadily increasing. Two workshops will be held over the course of the grant period, one in late 2014 and the second in early 2016, focusing on municipal staff, NGO staff, and local volunteers. The City of Norfolk will coordinate workshop logistics and Alliance for the Chesapeake Bay staff will develop materials and conduct the training.

Support of NGO-led Community BMP and Habitat Restoration Projects

BMPs and habitat restoration installed on public right-of-way will be owned by the City of Norfolk. Annual inspections will be conducted and major maintenance performed as necessary. Through coordination with Lafayette Wetlands Partnership and Friends of Norfolk's Environment, community sponsors will be identified to assist in develop and normal maintenance of each project, increasing ownership of community water quality improvement practices. Should sponsors fail to maintain BMPs or restoration sites properly the City will handle all necessary ongoing maintenance.

Task 5: Support Lafayette Wetlands Partnership Buffer Installation- The City will provide to Lafayette Wetlands Partnership resources in the form of planting and soil material, plus assistance with site preparation, for at least 10000 sq ft of buffer plantings on community right-of-way. Estuarine buffer project sites will be identified in coordination with the City and interested communities. Buffers will be designed to be 35 feet or greater in width where possible, though in a built-out city such as Norfolk this is not always viable. Where buffers cannot be planted to this width the design will be based on Virginia BMP Manual and Chesapeake Bay Program specifications for urban filter strips, including amended soils. This extra step will allow for additional runoff treatment where appropriate widths cannot be achieved.

Task 6: Support Lafayette Wetlands Partnership Rain Garden Installation- The City will provide to Lafayette Wetlands Partnership resources in the form of design assistance, planting and soil material, plus assistance with site preparation, for at least 1200 sq ft of bioretention on community right-of-way. Project sites will be identified in coordination with the City and interested communities. Strong consideration will be given to any sites developed through green infrastructure assessments such as the recently awarded EPA Green Infrastructure Technical Assistance grant for Knitting Mill Creek, tributary to the Lafayette River. An estimated 2-3 individual bioretention systems will be implemented in areas that maximize treatment, while also acting as a demonstration to encourage rain garden installation on residential lots. Design of the systems will follow specs from the Virginia BMP Manual or Chesapeake Bay Program guidance.

Task 7: Support Friends of Norfolk's Environment NeighborWoods Program- The City will provide Friends of Norfolk's Environment 300 trees to assist with their recently developed Neighborwoods tree planting program. These trees will supplement other grant funding to ensure the program has adequate stock for the duration of the grant period. Trees are expected to be distributed at events in Fall 2015. Each will be adopted by a local resident and planted in approved community right-of-way or on residential property. The adoptee will be responsible for watering the tree through the crucial first two seasons and reporting any disease or death.

E. Monitoring and Measuring Performance

All BMPs and restoration projects will be tracked by City staff for reporting as progress towards Chesapeake Bay TMDL requirements. Monitoring of BMP and restoration functionality will be conducted on a scheduled as recommended by the Virginia BMP Handbook and Chesapeake Bay Program guidance. City engineers or consultants will assist with design and pollutant reduction calculations for all projects. Installed BMPs and projects, pollutant reductions, and major maintenance updates will be reported annually to the Virginia Department of Environmental Quality (DEQ) as part of the City's MS4 annual report. Once pending Phase I MS4 permits are renewed, more detailed tracking will be established as part the TMDL Action Plan to meet the Chesapeake Bay TMDL Special Condition of the permit. Data will continue to be reported annually to DEQ as part of the MS4 permit annual report and will include overall progress towards meeting the Bay TMDL.

F. Partner Justification

The City of Norfolk has a strong history of partnership with the Lafayette Wetlands Partnership and Friends of Norfolk's Environment. Both organizations have adopted successful models of encouraging citizen leadership in the development, implementation, and maintenance of their various projects. By establishing this greater-than-normal level of buy in from community members early on, the Partnership and FONE have found that a sense of ownership over the project develops, keeping community volunteers involved for many years. By permitting the development of wetland, rain garden, buffer, and tree planting projects on City right-of-way by these groups, Norfolk has seen an increase in small scale community-led projects that may otherwise not have been constructed under the normal pattern of municipal stormwater management. The current effort to reach homeowners on their own properties meshes perfectly as they've seen the success of projects in their communities and now can be encouraged to extend these practices on a smaller scale to their homes.

In development of the Bay Star Homes program the City sought advice from both Elizabeth River Project and Lynnhaven River Now, both of which have successfully developed residential pledge and BMP programs in their respective watersheds. Their efforts at reaching citizens have made other areas of the city eager to have the same opportunities.

While interaction with the Alliance for the Chesapeake Bay has been limited in Hampton Roads, their staff's goal of piloting the SMART tool throughout Virginia make them natural partners with the City and local NGOs. Their experience with the tool in Maryland will be valuable as the City works to develop a knowledge base of the tool among local staff, NGOs, and volunteers. While all possible attendees for the proposed workshop have not been directly contacted, there is strong interest in tools to assist with tracking and reporting BMPs and we feel positive any training held by the Alliance will be well supported.

G. Dissemination and Transferability of Results

Residential BMP programs are becoming popular throughout the Chesapeake Bay watershed and restoration of natural habitat has been a focus for many years. While the development of the Bay Star Homes program may not be a unique idea, the models utilized by FONE and the Partnership have shown excellent results that may be easily transferable to other areas of Hampton Roads, the Bay and beyond. By utilizing a core group of volunteer scientists, engineers, landscape professionals, and regulators to provide guidance for eager community leaders to jointly develop and

implement small scale projects on public right-of-way, these organizations have leveraged a small amount of resources into difference-making projects. By including members of each community on projects that will have an impact in their immediate neighborhood, the FONE/Partnership model creates a strong sense of ownership up-front and moving forward. Through efforts such as those proposed in this grant and the recently awarded EPA Green Infrastructure Technical Assistance grant, the City, FONE, and the Partnership hope to share this successful model with other communities.

H. Budget Impacts

Funding for the tasks included in this proposal have not been sought from any further sources. The City of Norfolk has designated \$30,000 each from the FY15 and FY16 stormwater budgets towards enhancement of the Bay Star Homes program. The program also received a grant of \$6,000 for collection of soil tests, which are currently being used to educate program participants on the importance of testing soil prior to fertilization. The Friends of Norfolk's Environment's Neighborwoods program continues to operate under an Alliance for Community Trees grant of \$20,000 which has been used to distribute trees in spring of 2014 and will do so again in fall of 2014.

Award of 20% less than the requested \$80,000 would result in a reduction of community projects under Tasks 5 and 7. 200 trees would be provided to FONE's Neighborwoods program rather than 300 and support for approximately 6500 sq ft of estuarine buffer rather than the proposed 10,000 sq ft.



National Fish and Wildlife Foundation
1133 15th St., NW
Suite 1100
Washington, DC 20005

May 14, 2014

To Whom It May Concern,

Elizabeth River Project is pleased to support the proposal by the City of Norfolk for expansion of residential and community water quality enhancement programs.

The Bay Star Homes program recently started by the City of Norfolk follows the model of other successful homeowner pledge and BMP programs including Elizabeth River Project's River Star Homes. Expansion of this program to include on-the-ground BMPs is an excellent next step that will assist the City and the Chesapeake Bay in meeting its water quality goals. The request for support of a pilot program for the SMART tool, developed by the University of Maryland in collaboration with the Chesapeake Bay Program, is important in ensuring that Virginia does not fall behind in tracking these important lot-level BMPs. Plans for pilots of the SMART tool in other areas of Virginia are proposed and a series of training event which also includes Hampton Roads would be ideal.

In support of this proposal, the Elizabeth River Project will coordinate with the City of Norfolk to organize a one-day training of the SMART tool. Invitations will be extended to staff in the Hampton Roads municipalities, as well as Lynnhaven River Now, which also operates a residential BMP programs in the region.

We look forward to assisting in the development of this program that will assist in improving water quality in the Chesapeake Bay.

Sincerely,

Marjorie Mayfield-Jackson
Executive Director
Elizabeth River Project
475 Water St. Suite C103A
Portsmouth, VA
(757) 399-7487



National Fish and Wildlife Foundation
ATTN: Jake Reilly
1133 15th St., NW
Suite 1100
Washington, DC 20005

May 14, 2014

Dear Mr. Reilly,

The Alliance for the Chesapeake Bay is pleased to support the proposal by the City of Norfolk for expansion of residential and community water quality enhancement programs.

The Bay Star Homes program recently started by the City of Norfolk follows the model of other successful homeowner pledge and BMP programs throughout Virginia such as the Alliance's River Wise Communities and Elizabeth River Project's River Star Homes. Expansion of this program to include on-the-ground BMPs is an excellent next step that will assist the City and the Chesapeake Bay in meeting its water quality goals. The City of Norfolk wishes to partner with the Alliance as they pilot the implementation of the SMART tracking and reporting tool developed for their Chesapeake RiverWise Communities program by MD Sea Grant Extension.

In support of this proposal, the Alliance for the Chesapeake Bay will coordinate with the City of Norfolk to organize two one-day trainings of the SMART tool. Invitations will be extended to staff in the Hampton Roads municipalities, as well as Elizabeth River Project and Lynnhaven River Now, both of whom operate residential BMP programs in the region.

We look forward to assisting in the development of this program that will assist in improving water quality in the Chesapeake Bay.

Sincerely,

Nissa Dean
Virginia Director
Alliance for the Chesapeake Bay
530 East Main Street, Ste 200
Richmond, VA 23218
804-775-0951

501 6th Street
Annapolis, MD 21403
PH: 443-949-0575
FAX : 443-949-0673

3310 Market Street, Suite A
Camp Hill, PA 17011
PH: 717-737-8622
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530 E. Main Street, Suite 200
Richmond, VA 23219
PH: 804-775-0951
FAX : 804-775-0954

www.allianceforthebay.org

National Fish and Wildlife Foundation
1133 15th St., NW
Suite 1100
Washington, DC 20005

May 14, 2014

To Whom It May Concern:

The Lafayette Wetlands Partnership, a citizen-led initiative committed to neighborhood stewardship of wetlands, wholeheartedly supports the proposal by the City of Norfolk to expand community-based water quality enhancement programs. The Partnership has completed eight wetland restoration projects over seven years that have added 9,000 square feet of vegetated wetlands to the Lafayette River. Buffer plantings and rain gardens have been a part of these projects, and all projects were planned and conducted by Norfolk citizens in collaboration with their city government.

Norfolk is a city both surrounded and interlaced by water. It is an historic city with many platted segments of land along its rivers and creeks. Opportunities abound for adding buffer plantings and rain gardens to help protect the land from erosion and the waters from bacterial and nutrient runoff. The Partnership has a seven-year track record of working with its government in executing citizen-based and citizen-led work on publicly-owned land. We have built the kind of relationships that make us well-prepared to make responsible use of funding that involves citizens in the protection of the water quality of their city.

If the proposal is successful, the Lafayette Wetlands Partnership will integrate within its work plan the new projects that are made available. It already is working under an Environmental Protection Agency "green infrastructure" technical assistance grant to identify "green" methods for controlling storm water runoff into the Knitting Mill Creek watershed. The findings of the technical assistance grant will be available in December 2014. Its recommendations can be integrated into project planning that leads to improved water quality of the Lafayette River.

The members of the Lafayette Wetlands Partnership look forward to working with the City of Norfolk as it involves its citizens in protecting the health of its waters.

Cordially,



John D. Stewart
Lafayette Wetlands Partnership



National Fish and Wildlife Foundation
1133 15th St., NW
Suite 1100
Washington, DC 20005

May 15th, 2014

To whom it may concern:

The Friends of Norfolk's Environment, (FONE) a charitable organization that supports leading citizens to environmental stewardship would like to share its support in the City of Norfolk expanding water quality enhancement programs.

The Friends of Norfolk's Environment participates in the Alliance for Community Trees Neighborwoods program. This work helps expand the tree canopy in Norfolk to enhance the landscape, provide cleaner air, reduce flooding and improve water quality while bringing community together.

If the grant is awarded, FONE will provide trees and education to citizens and local groups to be planted on both private and public land.

Thank you,

Executive Director, Friends of Norfolk's Environment

www.foneonline.org

Proposed projects may be installed on residential or community property anywhere within the boundary of the City of Norfolk. No specific project locations have been pre-determined. The city boundary is included for reference.



NFWF

Statement of Litigation

Instructions: Save this document on your computer and complete. The final narrative should not exceed two (2) pages; do not delete the text provided below. Once complete, upload this document into the on-line application as instructed.

Litigation: In the space provided below, state any litigation (including bankruptcies) involving your organization and either a federal, state, or local government agency as parties. This includes anticipated litigation, pending litigation, or litigation completed within the past twelve months. Federal, state, and local government applicants are not required to complete this section. If your organization is not involved in any litigation, please state below.

The City of Norfolk is not involved with litigation related to this proposed project.

Board of Directors- The City of Norfolk is a local government and is exempt.